Air Resources Board

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Chairman
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Winston H. Hickox
Secretary for Environmental Protection

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Governor

June 11, 1999

SUBJECT: **NOTICE OF PREPARATION OF A DRAFT PROGRAM ENVIRONMENTAL IMPACT REPORT**

PROJECT TITLE: **SUGGESTED CONTROL MEASURE FOR ARCHITECTURAL COATINGS**

In accordance with the California Environmental Quality Act (CEQA), the Air Resources Board (ARB) is the Lead Agency and will prepare a Program Environmental Impact Report (EIR) for the project identified above. The proposed project is essentially a model rule (i.e., a Suggested Control Measure) which is designed to be considered for adoption by the local air pollution control and air quality management districts (districts) in California. Under California law, the districts have the primary legal authority for adopting control measures for architectural coatings. The adoption of the Suggested Control Measure (SCM) by the ARB will not impose binding requirements on the districts or on any other person. Binding requirements would only be imposed if one or more districts adopt the SCM as a district rule, which would then apply to affected persons within the jurisdiction of each district.

The SCM will reduce VOC emissions from certain architectural coatings, if one or more districts adopt it. The purpose of this Notice of Preparation (NOP) is to inform appropriate government agencies and the public that a Draft Program EIR is being prepared, and to solicit comments on the environmental areas within each agency's jurisdiction.

In conjunction with the development of the SCM, it is necessary to address the effects of the proposal on the environment. The ARB is preparing the appropriate environmental analyses in accordance with CEQA. The ARB plans to conduct its environmental impact analysis in the form of a Program EIR, which would then be available for use by each district that decides to adopt the SCM. This NOP serves two purposes: to solicit information on the scope of the environmental analysis for the proposed project and to notify the public that ARB will prepare a Draft Program EIR to assess potential environmental impacts that may result from the implementation of the SCM. If potential adverse impacts are identified, the Draft Program EIR will also discuss feasible mitigation measures to reduce potential significant adverse environmental impacts. The Draft Program EIR will also include a discussion of all other topics required by CEQA, as well as a range of reasonable project alternatives.

The attached materials do not require a response from you. Their purpose is simply to provide information to you on the above project. If the proposed project has no bearing on you or your organization, no action on your part is necessary.

The project's description, location, and potential environmental impacts are described in the Initial Study for the proposed project that is attached to this NOP. This NOP and Initial Study are available for a 30-day review and comment period. Comments focusing on your area of expertise, your agency's area of jurisdiction, or scope of the project alternatives should be addressed to Mr. Jim Nyarady, Manager, Strategy Evaluation Section, Stationary Source Division, at the address shown above, or sent by FAX to (916) 322-6088. Mr. Nyarady's telephone number is (916) 322-8273. Alternatively, comments may be sent via the Internet to jnyarady@arb.ca.gov. Comments must be received no later than 5:00 PM on July 22, 1999. Please include your name and phone number or the name and phone number of the contact person for your agency.

Copies of this NOP and Initial Study are available from the ARB's Public Information Office at the address shown above, and are also available on the ARB's Internet site at http://www.arb.ca.gov/arch/arch.htm.

Date: June 11, 1999 **Signature**:

Peter D. Venturini

Title: Chief, Stationary Source Division

Reference: California Code of Regulations, Title 14, §§15082(a), 15103, and 15375

California Environmental Protection Agency

Air Resources Board

INITIAL STUDY

FOR THE

DRAFT PROGRAM ENVIRONMENTAL IMPACT REPORT

FOR A

SUGGESTED CONTROL MEASURE FOR ARCHITECTURAL COATINGS

June 1999

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INTRODUCTION

The proposed Suggested Control Measure (SCM) for Architectural Coatings is a "project" as defined by the California Environmental Quality Act (CEQA). The proposed project is essentially a model rule (i.e., a Suggested Control Measure) intended to reduce volatile organic compound (VOC) emissions from architectural coatings. The SCM is designed to be considered by the local air pollution control and air quality management districts (districts) in California when adopting or amending architectural coatings rules.

Under California law, the districts have the primary legal authority for adopting control measures for architectural coatings (see Health and Safety Code, §§39002, 40000, and 40001). The approval of the SCM by the Air Resources Board (ARB) will not impose binding requirements on any person. Binding requirements will only be imposed if one or more districts decide to adopt the SCM as a district rule. Upon adoption, a district rule would then apply to affected persons within the jurisdiction of the district. In addition, approval of the SCM by the ARB will not impose an obligation on any district to subsequently adopt the SCM. It will be up to each district to decide if adoption of the SCM as a district rule is needed to attain the state and federal ambient air quality standards within the district.

Both CEQA and ARB policy require the ARB to evaluate the potential adverse environmental impacts of proposed projects. CEQA also requires that methods to reduce or avoid identified significant adverse environmental impacts of a project be implemented if feasible. The purpose of the Draft Program Environmental Impact Report (EIR) is to inform public agencies and interested parties of potentially significant adverse environmental impacts associated with the implementation of the proposed project.

California Public Resources Code §21080.5 allows public agencies with regulatory programs to prepare a plan or other written document in lieu of an environmental impact report, once the Secretary of the Resources Agency has certified the regulatory program. The Secretary of Resources has certified the portion of the ARB's regulatory program "… which involves the adoption, approval, amendment, or repeal of standards, rules, regulations, or plans to be used in the regulatory program for the protection and enhancement of ambient air quality in California." (see title 14, California Code of Regulations (CCR), §15251(d)). The adoption of the SCM is within the scope of this certification, which would allow the ARB to include the environmental analysis for the SCM in an ARB Staff Report instead of preparing a formal environmental impact report or negative declaration (see title 17, CCR, §§60005 to 60007).

Instead of placing the environmental analysis in an ARB Staff Report, however, the ARB believes that a Program EIR format would be more useful to districts that choose to adopt the SCM. When a district decides to adopt the SCM as a local district rule, the district will need to determine how to comply with CEQA. One possibility would be for each district to prepare its own new project EIR for the district version of the SCM. But a new project EIR prepared by each district would require a large expenditure of resources, and would likely substantially duplicate the ARB's environmental impact analysis for what is essentially the same project. To avoid such duplication, the CEQA Guidelines (see title 14, CCR, §15168) allow a lead agency to

prepare a Program EIR for a series of actions that can be characterized as one large project and are related either: (1) geographically, (2) as logical parts in a chain of contemplated actions, or (3) in connection with the issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program.

For projects such as the ARB's SCM, which are specifically designed to be subsequently adopted by the districts as a local district rules, an environmental analysis in the form of a Program EIR provides the CEQA framework that can be relied upon by the districts when adopting ARB's SCM. Under the general principles of CEQA, the districts may use a similar environmental assessment prepared under the ARB's certified regulatory program in the same way that a Program EIR could be used. However, the precedent of using a Program EIR for this purpose is more clearly established in the CEQA Guidelines and case law, and the Program EIR format may be more familiar to the districts and the regulated community. For this particular SCM, it is important that the districts be provided with an environmental analysis format that will be consistent with, and more easily incorporated into, their own CEQA compliance process. Using a Program EIR format will accomplish this goal.

In preparing the Program EIR for ARB's SCM, the ARB will follow the procedural and substantive requirements for a Program EIR even though the ARB is not legally required to use this particular format. The Program EIR will be designed to specifically and comprehensively address the environmental impacts associated with the Architectural Coatings SCM in accordance with CEQA, so that the districts, if they choose to do so, may rely on the analysis in the Program EIR when adopting or amending their architectural coatings rules.

The ARB intends that each district may rely on the Program EIR by incorporating it by reference in whatever CEQA documents a district chooses to prepare for its own architectural coating rule. For example, a district could use the ARB's SCM Program EIR to provide the basis for an initial study for determining whether the district's version of the SCM may have any significant effects (see title 14, CCR §15168(d)). The district might then decide to prepare a negative declaration (if the district believes that the Program EIR appropriately analyzes the environmental impacts of adopting the SCM in that district), or a focused EIR (if, for example, the district believes that additional analysis may be necessary beyond the analysis contained in the Program EIR, in order to address factors that are specific to the individual district and may not have been fully considered in the Program EIR). These examples are not intended to dictate how a district may use the ARB's SCM Program EIR. It will be up to each district to decide on the best way to comply with CEQA in their particular circumstances. The ARB's SCM Program EIR will simply be available for whatever use the district feels is appropriate.

This Initial Study is intended to provide information about the proposed project to other public agencies and interested parties prior to the release of the Draft Program EIR. The Initial Study is being released for a 30-day review period. Written comments on the scope of the environmental analysis and possible project alternatives received by the ARB during the 30-day review period will be considered when preparing the Draft Program EIR.

PROJECT LOCATION

As mentioned above, the SCM is designed as a model rule to be adopted by the local districts throughout the state of California. There are 35 individual districts in California. (The addresses and phone numbers of each district are shown in Appendix A. The geographical boundaries of each district are shown on Figure 1-1.) If a district decides to adopt the SCM in the future, the district's version of the SCM would apply to affected persons within the geographical boundaries of that district.

The districts were created by the California Legislature as the public agencies responsible for developing and enforcing air pollution control regulations in the areas within their respective jurisdictions. By statute, districts are required to adopt or amend and enforce rules that will reduce air pollutant emissions in order to attain and maintain federal and state ambient air quality standards.

BACKGROUND

Air Quality in California

Although significant strides have been made in improving California's air quality, California still experiences the worst air quality in the nation for two pollutants of concern – ozone and particulate matter. To protect California's population from the harmful effects of both these pollutants, federal and state air quality standards have been set for ozone and PM_{10} (particulate matter less than 10 microns equivalent aerodynamic diameter). It should be noted that there are no state or federal ambient air quality standards for VOCs because they are not classified as criteria pollutants. VOCs are regulated, however, because emissions contribute to the formation of both ozone and PM_{10}.

While health-based ambient air quality standards have not been established for VOCs, numerous VOCs have been identified as toxic air contaminants (TACs) and are regulated through ARB's TAC control program. Benzene, for example, one hydrocarbon component of VOC emissions, is known to be a human carcinogen. In addition, health effects can occur from exposures to high concentrations of VOCs because of interference with oxygen uptake. In general, ambient VOC concentrations in the atmosphere are suspected to cause coughing, sneezing, headaches, weakness, laryngitis, and bronchitis, even at low concentrations.

Ozone -
Ozone is formed in the atmosphere through photochemical reactions of VOC, oxides of nitrogen (NOx), and other hydrocarbon materials with sunlight. Ozone is a deep lung irritant, causing air passages to become inflamed and swollen. Health effects associated with exposure to ozone pollution include an increase in the frequency and severity of asthma attacks, breathing and respiratory problems, loss of lung function, and damage to lung tissue.

Figure 1-1


California Air Districts and Counties
Air Districts are Delineated by Bold Black Text Labels and Grey Boundary Lines.
Counties are Delineated by Smaller Text Labels and Black Boundary Lines.
N
W
E
S
North Coast Unified
Siskiyou
SISKIYOU
Modoc
MODOC
Shasta
SHASTA
Lassen
LASSEN
HUMBOLDT
TRINITY
Tehama
TEHAMA
PLUMAS
Northern Sierra
SIERRA
Mendocino
MENDOCINO
Glenn
GLENN
Butte
BUTTE
NEVADA
Colusa
COLUSA
Feather River
Placer
PLACER
Lake
LAKE
YUBA
SUTTER
Yolo
YOLO
El Dorado
EL DORADO
ALPINE
Solano
Northern Sonoma
SONOMA
NAPA
SACRAMENTO
Amador
Calaveras
Sacramento Metro
MARIN
CONTRA COSTA
SAN JOAQUIN
Tuolumne
TUOLUMNE
MONO
Mariposa
MARIPOSA
SAN FRANCISCO
ALAMEDA
STANISLAUS
Bay Area
SAN MATEO
SANTA CLARA
MERCED
Great Basin Unified
SANTA CRUZ
MADERA
Monterey Bay Unified
SAN BENITO
San Joaquin Valley Unified
FRESNO
INYO
TULARE
MONTEREY
KINGS
SAN LUIS OBISPO
San Luis Obispo
KERN
Kern
Mojave Desert
SAN BERNARDINO
SANTA BARBARA
Antelope Valley
Santa Barbara
VENTURA
LOS ANGELES
Ventura
ORANGE
RIVERSIDE
South Coast
Imperial
IMPERIAL
SAN DIEGO
San Diego
0 50 100 150 200 Miles
California Environmental Protection Agency
Air Resources Board

PM_{10} –
Unlike ozone, which is a single chemical compound, particulate matter is a complex mixture of many different species generated from a wide array of sources. Particulate matter can be either directly emitted into the air in forms such as dust and soot, or it can be formed in the atmosphere (like ozone) from the reaction of gaseous precursors such as NOx, sulfur oxides (SOx), VOCs, and ammonia. PM_{10} can pass the human body's natural defense mechanism and be inhaled into the lungs. Health effects associated with exposure to particle pollution include an increase in the frequency and severity of asthma attacks, aggravation of bronchitis, reduced lung function in children, and premature death for people with existing respiratory and cardiac problems.

The vast majority of California's population who live in urban areas breathe unhealthy air for much of the year, as shown in Figure 1-2. Forty-six counties are currently designated as nonattainment for the state ozone standard, while 54 counties are designated as nonattainment for the state PM_{10} standard (ARB, "Proposed Amendments to the Designation Criteria and Amendments to the Area Designations for State Ambient Air Quality Standards, and Proposed Maps of the Area Designations for State and National Ambient Air Quality Standards," August 1998). These counties contain over 97 and 99 percent, respectively, of California's population, a clear indication of the extent and magnitude of the ozone and PM_{10} problems in California.

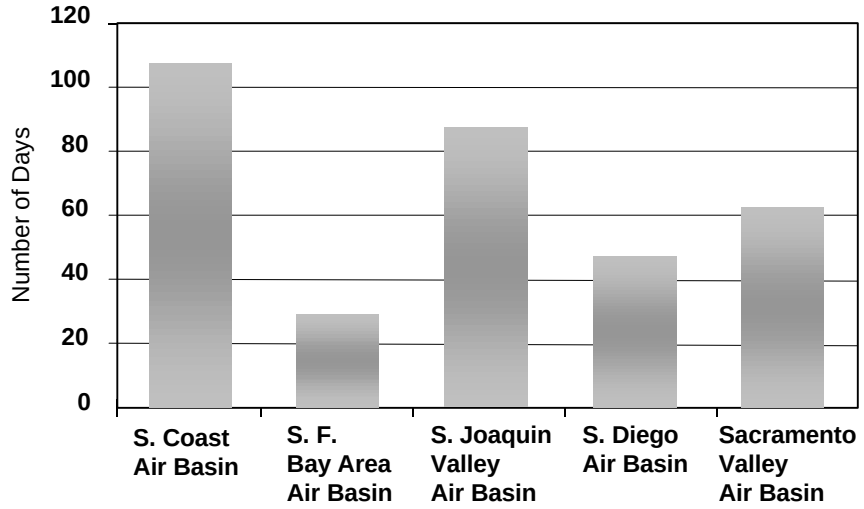
The California Clean Air Act requires districts that have been designated nonattainment for the State ambient air quality standards for ozone, carbon monoxide, sulfur dioxide, or nitrogen dioxide to prepare and submit plans for attaining and maintaining the standards (see Health and Safety Code §40910 et seq.). In addition, the federal Clean Air Act requires that districts designated nonattainment for the federal ambient air quality standards prepare State Implementation Plans to demonstrate attainment with the federal standards. In some of these districts, substantial additional emission reductions will be necessary if attainment is to be achieved. In developing their plans, each district determines which measures are necessary to include, as well as the specific details of each included measure. The SCM will be available for consideration by each district for inclusion in the district's state and federal plans.

District Architectural Coatings Rules

VOC emissions from architectural coating operations are currently regulated by a number of local district rules. Under these rules, emissions are controlled by limiting the VOC content, measured in grams per liter, of the architectural coatings sold and applied in the district. A table of the current district rules, including the applicable VOC limits, is included as Appendix B. Architectural coatings are defined by their application and use, and include coatings that are applied to stationary structures such as residential and commercial buildings; billboards; curbs and roads; and mobile homes. VOCs are emitted to the atmosphere from the evaporation of organic solvents used in coatings. Most of these current district rules, as well as the proposed SCM, apply to those persons who supply, sell, apply, solicit the application of, or manufacture such coatings.

Some of the limits in these existing rules were based on the ARB's 1989 SCM for architectural and industrial maintenance coatings. A consortium of California air pollution control districts,

Number of Days the State Ozone Standard was Exceeded in 1998



Calculated Number of Days the State 24-hour PM_{10} Standard was Exceeded in 1997

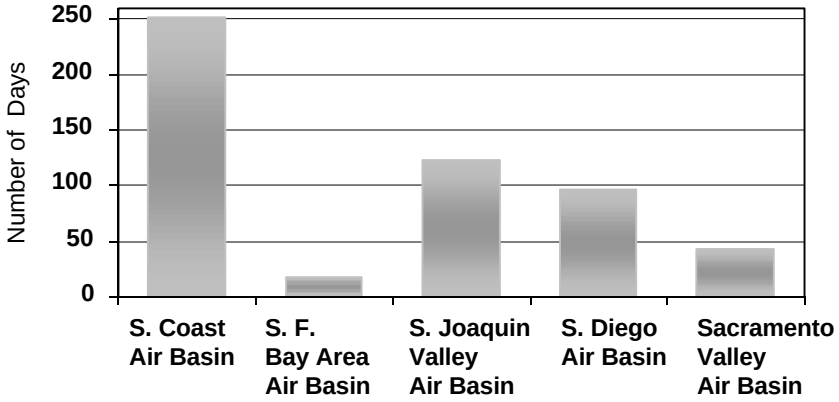


Figure 1-2

the ARB, U. S. Environmental Protection Agency Region IX, and paint manufacturers developed the provisions in the 1989 SCM. The proposed SCM will revise and update the 1989 SCM to reflect developments in coatings technology that have occurred since 1989.

PROJECT DESCRIPTION

The primary objective of the proposed SCM is to set VOC limits and other requirements that are feasible (based on existing and currently developing coatings technology) and that will achieve significant reductions in VOC emissions from architectural coatings. The SCM is also intended to serve as a model rule that will improve the clarity and enforceability of existing district architectural coatings rules, and provide a basis for uniformity among architectural coatings rules in California.

The proposed project is essentially a model rule (i.e., a Suggested Control Measure) that is designed to reduce VOC emissions from architectural coatings. The proposed SCM sets allowable VOC content limits for a number of architectural coating categories, including categories such as flats, non-flats, industrial maintenance, lacquers, floor, roof, rust preventative, stains, bituminous, quick-dry enamels, and primers, sealers, and undercoaters. The proposed VOC limits would become effective at various dates between 7/1/2001 and 7/1/2008, depending on the coating category. Other components of the proposed SCM include a three-year "sell-through" provision (for coatings manufactured before the applicable effective dates), definitions, test methods, standards for painting practices and thinning of coatings, and container labeling requirements. The draft language of the proposed SCM, and a discussion of the SCM's probable environmental effects, can be found in the Initial Study. For the complete text of the proposed SCM, please see Appendix C of this Initial Study.

PROJECTED EMISSION REDUCTIONS

Implementation of the proposed SCM throughout the state is currently estimated to result in over 30 tons per day of VOC emission reductions on an annual average inventory basis and over 35 tons per day on the summer planning inventory basis by the year 2010. Table 1-1 summarizes the currently proposed VOC limits and the associated projected emission reductions. These estimates could change, as additional data become available.

ALTERNATIVES

The Draft Program EIR will discuss and compare alternatives to the proposed project that may avoid or reduce potentially significant effects and that feasibly attain the basic objectives of the proposed project. The purpose of the discussion of alternatives is to foster informed decision making and public participation. A CEQA document need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative. The ARB encourages the public and affected agencies to provide any comments on the type of alternatives that should be considered in the Draft Program EIR.

Table 1-1

Proposed SCM VOC Limits and Associated Estimated Emission Reductions

Category	2001/02 Limits (grams/liter)	South Coast Reductions (tons/day)	Rest of State Reductions (tons/day)	2005/06/08 Limits (grams/liter)	South Coast Reductions (tons/day)	Rest of State Reductions (tons/day)
Flats	100	NA	1.41	50	NA	2.80
Non-flats	150	NA	1.87	50	NA	4.52
Bituminous	50	0.75	0.91	--	--	--
Lacquers	550	NA	0.98	275	NA	0.86
Fire-retardant	250	0	0	--	--	--
Floor	100	NA	0.28	50	NA	0.12
Graphic arts	150	0	0	--	--	--
Industrial maintenance	250	NA	3.01	100	NA	2.59
Mastic texture	250	0	0	--	--	--
Multi-color	250	NA	0.01	--	--	--
Pre-treatment wash primers	250	0	0	--	--	--
Primers, sealers, and undercoaters	200	NA	4.80	100	NA	1.50
Quick-dry enamels	250	NA	1.04	50	NA	0.81
Roof	50	0.13	0.15	--	--	--
Rust preventative	250	0.04	0.06	100	NA	0.09
Shellac-clear	650	0	0	--	--	--
Stains-clear and semi-transparent	250	NA	0.53	--	--	--
Stains-opaque	150	0.16	0.19	--	--	--
Traffic	150*	NA	0.42	--	--	--
Waterproofing sealers-wood	250	NA	0.40	--	--	--
TOTALS		**1.08**	**16.06**		**0**	**13.29**

NA Not applicable since SCAQMD already has these limits in place
* This limit is effective in September 1999 under the National Rule

Some alternatives that are under consideration for inclusion in the Draft Program EIR are summarized below.

- Low Vapor Pressure Exemption - Under this alternative, VOC compounds with low vapor pressures may be exempted as a VOC from the overall VOC content of the coating.

- Performance-based standards - Emission standards would be based on VOC emissions per area covered per year rather than VOC content of the coatings.

- Reactivity - VOC emission limits would be based on the ozone reactivity of affected coatings' VOC compounds rather than the VOC content of the coating.

- Product Line Averaging - Rather than a coating manufacturer having to meet a specific VOC content limit for each specific product line, this alternative would allow averaging for all product lines.

- Regional Deregulation – Architectural coatings could be exempt from regulation in geographically distinct areas where local VOC emissions have no potential to contribute significantly to ozone levels.

- Seasonal Approach - Low-VOC content limits for various coatings would only be in effect during the "high ozone season" (i.e., typically the summer months). During the "low ozone season" (i.e., typically the winter months), affected coatings with higher VOC content limits could be used.

- VOC Content Limits/Final Compliance Deadlines - The proposed VOC content limits and/or final compliance deadlines as shown above in Table 1-1 may be modified.

Written suggestions on project alternatives received during the comment period for the Notice of Preparation and Initial Study will be considered when preparing the Draft Program EIR.

INITIAL ENVIRONMENTAL EVALUATION

Chapter 2 of this Initial Study contains an environmental checklist that was prepared to identify potentially significant adverse environmental impacts, and will determine the scope of the analysis in the Draft Program EIR. Items checked as having a "Potentially Significant Impact" will be analyzed further in the Draft Program EIR.

C H A P T E R 2

E N V R O M E N T A L C H E C K L I S T

Introduction

General Information

Potentially Significant Impact Areas

Determination

Environmental Checklist and Discussion

INTRODUCTION

The environmental checklist provides a standard evaluation tool to identify a project's adverse environmental impacts. A sample checklist form is provided in the State CEQA Guidelines, Appendix G. The checklist presented in this document is a slightly modified form of the Appendix G checklist, but it still addresses all areas identified in the Appendix G checklist. This checklist identifies and evaluates potential adverse environmental impacts that may be created by the proposed project.

GENERAL INFORMATION

Name of Proponent:	Air Resources Board
Address of Proponent:	2020 L Street
	Sacramento, California 95814
Lead Agency:	Air Resources Board
Contact Person	Mr. Jim Nyarady
	(916) 322-8273
Name of Project:	Suggested Control Measure for Architectural Coatings

POTENTIALLY SIGNIFICANT IMPACT AREAS

The environmental areas marked with an "✓" (checkmark) have the potential to be adversely affected by the proposed project. A checkmark of potentially significant impact does not mean the proposed project will have a significant impact but requires further evaluation, which may lead to an ultimate determination of no significant impact. An explanation relative to the determination of each of the areas can be found in the expanded checklist that follows.

☐	Land Use and Planning	☑	Transportation/ Circulation	☑	Public Services
☐	Pop./Housing	☐	Biological Resources	☑	Solid Waste/ Hazardous Waste
☐	Geophysical	☐	Energy/Mineral Resources	☐	Aesthetics
☑	Water	☑	Hazards	☐	Cultural Resources
☑	Air Quality	☐	Noise	☐	Recreation
				☑	Mandatory Findings of Significance

DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☑ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Date: June 11, 1999 Signature: _____

Peter D. Venturini, Chief
Stationary Source Division

ENVIRONMENTAL CHECKLIST AND DISCUSSION

	Potentially Significant Impact	No Impact
I. LAND USE AND PLANNING. Would the proposal:		
a) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☑
b) Conflict with any applicable habitat conservation or natural community conservation plan?	☐	☑
c) Affect agricultural resources or operations (e.g., impacts to soils or farmlands, or impacts from incompatible land uses)?	☐	☑
d) Physically divide an established community (including a low-income or minority community)?	☐	☑

Discussion:
Implementing the proposed SCM will not cause significant adverse impacts to land uses or land use planning in the state. It is anticipated that increased activities, if any, would occur at existing facilities or sites. Thus, no new resources or facilities are expected to be constructed which would result in any land use impacts.

No new development or alterations to existing land use designations will occur as a result of the implementation of the proposed SCM. It is not anticipated that the use of compliant SCM coatings throughout the state would require additional land to continue current operations or require rezoning. Therefore, no significant adverse impacts affecting existing or future land uses are expected.

Present or planned land uses in the state will not be affected as a result of the proposed SCM. Land use and other planning considerations are determined by local governments and no land use or planning requirements will be altered by the proposed SCM.

	Potentially Significant Impact	No Impact
II. POPULATION AND HOUSING. Would the proposal:		
a) Induce substantial growth in an area either directly or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?	☐	☑
b) Displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere?	☐	☑

Discussion:
Human population in the state is anticipated to grow regardless of implementing the proposed SCM. Further, the proposed SCM is not expected to result in the creation of any industry that would affect population growth, or directly or indirectly induce the construction of single- or multiple-family units. The proposal will primarily affect the formulation of architectural coatings and is not anticipated to generate any significant effects, either direct or indirect, on the state's population as no additional workers are anticipated to be required to comply with the proposed SCM. Further, the SCM is not expected to cause a relocation of population within the state. As a result, housing in the state is expected to be unaffected by the proposed amendments. New housing construction is not expected to be affected by the use of lower-VOC coatings.

Additionally, adoption of the SCM is not expected to contribute to any significant housing cost increases because low-VOC coatings are currently being sold at prices comparable to "traditional" higher-VOC coatings. Direct economic impacts are not required to be analyzed pursuant to CEQA unless they also have a significant, direct effect on physical environmental parameters. Cost impacts associated with implementation of the SCM will be discussed in the Economic Impact Analysis, which will be prepared as part of the ARB Staff Report for the proposed SCM.

	Potentially Significant Impact	No Impact
III. GEOPHYSICAL. Would the proposal:		
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic–related ground failure, or landslides?	☐	☑
b) Result in substantial soil erosion or the loss of topsoil?	☐	☑

c) Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☑

Discussion:
Architectural coatings are applied to buildings, stationary structures, roads, etc. The proposed SCM VOC content limits affect coating formulators and have no effects on geophysical formations in the state. There are no provisions in the proposed SCM that would call for the disruption or overcovering of soil, changes in topography or surface relief features, the erosion of beach sand, or a change in existing siltation rates. Additionally, since add-on control equipment will not be used to reduce VOC emissions from architectural coatings, the SCM is not expected to result in additional exposure of people or property to geological hazards such as earthquakes, landslides, mudslides, ground failure, or other natural hazards.

	Potentially Significant Impact	**No Impact**
IV. WATER. Would the proposal:		
a) Violate any water quality standards or waste discharge requirements?	☑	☐
b) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☑	☐
c) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level?	☐	☑
d) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in erosion or flooding on- or off-site?	☐	☑
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☑	☐
f) Otherwise substantially degrade water quality?	☑	☐

g) Require or result in the construction of new water, wastewater treatment facilities, stormwater drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☑
h) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☑	☐
i) Result in a determination by the wastewater treatment provider that serves or may serve the project's projected demand in addition to the provider's existing commitments?	☑	☐

Discussion:
Many architectural resin manufacturers and coatings formulators are expected to meet the lower VOC content limits in the SCM by reformulating or substituting VOC-containing materials with other substances (e.g., water-based, nontoxic, and/or VOC-free materials). The expanded use of reformulated materials to replace VOC- containing materials has the potential to adversely affect both water demand and water quality (e.g., surface water and groundwater). As the production of water-based materials increases, for example, there could be a greater demand for water from those industries that manufacture the water-based materials. In addition, use of water-based coatings may generate increased amounts of wastewater from coating applications. Water used for equipment cleanup and unused product may contain hazardous materials in excess of levels permitted in wastewater discharges. This wastewater may be discharged into storm drains and sanitary sewers and may, therefore, alter surface water quality. Additionally, wastewater from cleanup activities could be dumped on the ground, which may infiltrate into the water table, thus affecting groundwater quality. These water impacts will be evaluated in more detail in the Draft Program EIR.

	Potentially Significant Impact	**No Impact**
V. AIR QUALITY. Would the proposal:		
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☑
b) Violate any air quality standard or contribute to an existing or projected air quality violation?	☐	☑
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☑
d) Expose off-site receptors to significant concentrations of hazardous air pollutants?	☑	☐

e) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	☐	☑
f) Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)?	☑	☐
g) Create objectionable odors affecting a substantial number of people?	☑	☐

Discussion:
In connection with the development of the 1989 SCM and the adoption of various local district rules in which the VOC content limits of various coating categories were lowered, comments were received that estimated emission reductions would not be as great as originally anticipated for eight reasons, which are summarized below:

More Thickness
Coating formulators and coating contractors assert that reformulated compliant water- and solvent based coatings are very viscous (e.g., high-solids content) and difficult to handle during application, tending to produce a thick film when applied directly from the can. A thicker film indicates that a smaller surface area is covered with a given amount of material, thereby increasing VOC emissions per unit of area covered.

More Thinning
Because reformulated compliant water- and solvent-based coatings are more viscous (e.g., high-solids content), coating manufacturers and coating contractors assert that painters have to adjust the properties of the coatings to make them easier to handle and spread. Especially for solvent-based coatings, this adjustment consists of thinning the coating as supplied by the manufacturer by adding solvent to change the viscosity of the coating. The added solvent increases VOC emissions back to or sometimes above the level of older higher-VOC formulations. With water-based coatings, thinning should not be an issue because water is the solvent used to thin these coatings.

More Priming
Coating formulators and coating contractors assert that reformulated compliant water- and low-VOC solvent-based topcoats do not adhere as well as higher-VOC solvent-based topcoats to unprimed substrates. Therefore, the substrates must be primed with typical solvent-based primers to enhance topcoat adherence. Additionally, water-based sealers do not penetrate and seal porous substrates, like wood, as well as traditional solvent-based sealers. This results in three or four coats of the sealer per application compared to one coat for a high-quality solvent-based sealer.

More Topcoats
Coating formulators and coating contractors assert that reformulated compliant water- and low-VOC solvent-based topcoats may not cover, build, or flow-and-level as well as the solvent-based formulations. Therefore, more coats are necessary to achieve equivalent cover and coating build-up.

More Touch-Ups and Repair Work
Coating formulators and coating contractors assert that reformulated compliant water- and low-VOC solvent-based formulations dry slowly, and are susceptible to damage such as sagging, wrinkling, alligatoring, or becoming scraped and scratched. The high-solids solvent-based enamels tend to yellow in dark areas. Water-based coatings tend to blister or peel, and also result in severe blocking problems. All of these problems require additional coatings for repair and touch-up.

More Frequent Recoating
Coating manufacturers and coating contractors assert that the durability of the reformulated compliant water- and low-VOC solvent-based coatings is inferior to the durability of the traditional solvent-based coatings. Durability problems include cracking, peeling, excessive chalking, and color fading, which all typically result in more frequent recoating.

More Reactivity
Different types of solvents have different degrees of "reactivity," which is the ability to accelerate the formation of ground-level ozone. Coating formulators and coating contractors assert that the reformulated compliant water- and low-VOC solvent-based coatings contain solvents that are more reactive than the solvents used in higher-VOC solvent-based formulations. Furthermore, water-based coatings perform best under warm, dry weather conditions, and are typically recommended for use between May and October. Since ozone formation is also dependent on meteorological conditions, use of waterborne coatings during this period increases the formation of ozone.

Substitution
Coating formulators and coating contractors assert that since reformulated compliant water- and low-VOC solvent-based coatings are inferior in durability and are more difficult to apply, consumers and contractors will substitute better performing coatings in other categories for use in categories with low compliance limits. An example of this substitution could be the use of a non-flat coating (currently with a higher compliance limit) in place of a low-VOC, flat coating on interior drywall.

All of these issues will be analyzed in more detail in the Draft Program EIR.

In the past, comments were also received regarding secondary emissions from power plants providing power to special spray equipment used to apply reformulated coatings. It is not expected that current baseline emissions will increase because energy usage associated with providing power for special spray equipment used to apply reformulated coatings is expected to be negligible. Consequently, energy impacts are not considered to be significant. Therefore, secondary emissions from power plants are not expected to be significant and will not be evaluated further.

Toxics
The ARB has also received comments in the past that compliant low-VOC coatings are often formulated with toxic/hazardous compounds. As a result, material replacement or reformulation to reduce the use of high-VOC solvent-based coatings has the potential to result in health risks associated with exposure to both carcinogenic and non-carcinogenic (e.g., acute and chronic) toxic air contaminants. Material reformulation or substitution may result in increased use of acetone, a compound that has been designated as an exempt VOC by U.S. EPA and the proposed SCM. Since the proposed SCM does not define acetone as a VOC, there exists the potential for increased acetone use in reformulated coatings. Increased application of acetone-based coatings has the potential to increase objectionable odors. Toxic air impacts and potential odor impacts will be evaluated in more detail in the Draft Program EIR.

	Potentially Significant Impact	No Impact
VI. TRANSPORTATION/CIRCULATION. Would the proposal:		
a) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☑	☐
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☑	☐
c) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☑
d) Result in inadequate emergency access?	☐	☑
e) Result in inadequate parking capacity?	☐	☑
f) Result in hazards or barriers for pedestrians or bicyclists?	☐	☑
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☑

Discussion:
The proposed SCM will not substantially increase the amount of businesses or equipment in the state. The main effect of the proposed limits will be to alter the way certain architectural coatings are manufactured. The SCM will not result in a substantial increase in vehicle trips throughout the entire state from the transportation of compliant water-based or low-VOC

solvent-based coatings. Even if more frequent application of compliant coatings may occur as a result of the implementation of the SCM, the frequency and concentration of daily trips to and from any one location in the state (e.g., manufacturer to distribution center or to retail painting store, contractor to retail painting store then to job site, or do-it-yourselfer to retail painting store then back home) is not expected to cause significant traffic impacts. Therefore, potential increases in traffic or alterations of traffic patterns are not anticipated from the manufacture and delivery of compliant coatings.

There is, however, the possibility of increased trips to landfills for the disposal of additional waste materials (coatings and containers) due to problematic performance characteristics (shelf life, pot life, and freeze/thaw) of certain low-VOC coatings formulations. These impacts will be evaluated in more detail in the Draft Program EIR.

Coating performance and durability issues will be discussed relative to potential indirect air quality impacts in the Air Quality Impacts section of the Draft Program EIR

	Potentially Significant Impact	**No Impact**
VII. BIOLOGICAL RESOURCES. Would the proposal:		
a) Have substantial adverse effects, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☑
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☑
c) Have a substantial adverse effect on federally protected wetlands as defined by § 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means?	☐	☑
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☑
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☑

f) Conflict with the provisions of an adopted Habitat Conservation plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☑

Discussion:
The SCM is not expected to adversely affect existing plant or animal species or communities, unique or endangered plant or animal species, or agricultural crops. Improvements in air quality from implementation of the SCM are expected to provide health benefits to plant and animal species as well as the human residents in the state. No significant adverse impacts to biological resources are expected to result from the proposed rule amendments because the SCM is expected to affect facilities in residential, industrial, or commercial areas where biological resources are already severely disturbed. The proposed SCM will not significantly affect growth or land use development in the region and, therefore, will not create significant adverse direct or indirect impacts to biological resources.

	Potentially Significant Impact	**No Impact**
VIII. ENERGY AND MINERAL RESOURCES. Would the proposal:		
a) Conflict with adopted energy conservation plans?	☐	☑
b) Use non-renewable resources in a wasteful and inefficient manner?	☐	☑
c) Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State?	☐	☑
d) Result in the need for new or substantially altered power or natural gas utility systems?	☐	☑

Discussion:
Electricity
Because add-on control equipment is not expected to be used to comply with the provisions of the SCM, no additional energy use is expected to be required. Additionally, the SCM will not substantially increase the number of businesses or amount of equipment in the state. Furthermore, energy usage associated with providing power for any special spray equipment used to apply reformulated coatings is expected to be negligible. Consequently, energy impacts are not considered to be significant.

Natural Gas
The consumption of natural gas in the state is not expected to increase as a result of implementation of the SCM. Electricity will be the primary source of energy used to power the

spraying equipment operated at various sites. Consequently, natural gas energy impacts from implementing the SCM are not considered to be significant.

Fossil Fuels
The SCM is also expected not to substantial increase energy consumption from non-renewable resources (e.g., diesel and gasoline) above current state usage levels. Any incremental increase in fuel usage from trips associated with more frequent application of complaint coatings or waste disposal is expected to be negligible. There are sufficient supplies of gasoline and diesel to meet the small fuel demands associated with these potential trip increases. Therefore, fossil fuel energy impacts from implementing the SCM are not considered to be significant.

	Potentially Significant Impact	No Impact
IX. HAZARDS. Would the proposal:		
a) Create a significant hazard to the public or the environment through the routine transport, use, disposal, or other handling of hazardous materials?	☑	☐
b) Result in the handling of hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☑
c) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☑	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, create a significant hazard to the public or the environment?	☐	☑
e) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☑
f) Increase fire hazard in areas with flammable materials?	☑	☐

Discussion:
Risk of Upsets
Some coating manufacturers may elect to comply with the VOC content limits of the SCM by reformulating their coatings with acetone (exempt solvent). During past promulgation of local district coating and solvent rules, comments were received that acetone could result in hazards impacts (e.g., risk of fire or explosion) because of its flammability. Thus, the project-specific hazards impacts associated with the implementation of the SCM will be evaluated in more detail in the Draft Program EIR.

Human Health
Comments have also been received in the past that to meet some proposed VOC content limits, manufacturers would have to use hazardous solvents (i.e., glycol ethers –EGBE, diisocyanates, etc.) in their water-based reformulations. This, as the argument goes, would lead to human health impacts to workers and the public from their exposure to these compounds. Thus, the project-specific hazards impacts associated with the implementation of the SCM will be evaluated in more detail in the Draft Program EIR.

		Potentially Significant Impact	No Impact
X.	**NOISE.** Would the proposal result in:		
	a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☑
	b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☑
	c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☑
	d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☑

Discussion:
No significant noise impacts are anticipated by the implementation of the SCM. Coating formulators potentially affected by the proposed amendments are located in existing industrial or commercial areas. It is assumed that operations in these areas are subject to and in compliance with existing community noise standards. In addition to the noise generated by current operations, sources of noise in each district may include nearby freeways, truck traffic to adjacent businesses, and operational noise from adjacent businesses.

In general, the primary noise source at existing facilities is generated by vehicular traffic, such as trucks transporting raw materials to the facility, trucks hauling wastes away from the facility, trucks to recycle waste or other materials, and miscellaneous noise such as spray equipment (i.e., compressors, spray nozzles) and heavy equipment use (forklifts, trucks, etc.). Noise is generated during operating hours, which generally range from 6 a.m. to 5 p.m., Monday through Friday. The SCM is not expected to alter noise from existing noise generating sources.

Additionally, implementation of the SCM is not expected to result in significant noise impacts in residential areas. As with industrial or commercial areas, it is assumed that these areas are

subject to local community noise standards. Contractors or do-it-yourselfers applying compliant coatings in residential areas are expected to comply with local community noise standards.

	Potentially Significant Impact	No Impact
XI. PUBLIC SERVICES. Would the proposal result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:		
a) Fire protection?	☑	☐
b) Police protection?	☐	☑
c) Schools?	☐	☑
d) Parks?	☐	☑
e) Other public facilities?	☐	☑

Discussion:
The SCM may result in the use of acetone to reformulate lower-VOC coatings. Acetone is a volatile, flammable liquid at room temperature. Therefore, fire protection impacts will be evaluated in more detail in the Draft Program EIR.

	Potentially Significant Impact	No Impact
XII. SOLID WASTE/HAZARDOUS WASTE. Would the proposal:		
a) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid and/or hazardous waste disposal needs?	☑	☐
b) Comply with federal, state, and local statutes and regulations related to solid and hazardous wastes?	☐	☑

Discussion:
With the use of water-based coatings to comply with the proposed lower-VOC content limits, it is possible that less solid waste will be deposited into landfills because some of the excess

water-based material can be recycled and reused. There is, however, the possibility of increased disposal of waste materials (coatings and containers) due to problematic performance characteristics (shelf life, pot life, and freeze/thaw) of certain low-VOC coatings formulations. Therefore, impacts of the proposed SCM on existing landfill capacity will be evaluated in more detail in the Draft Program EIR.

	Potentially Significant Impact	No Impact
XIII. AESTHETICS. Would the proposal:		
a) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☑
b) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☑
c) Create a new source of light or glare that would adversely affect day or nighttime views in the area?	☐	☑

Discussion:
The proposed SCM does not require any changes in the physical environment that would damage any resources of interest to the public. The reason for this determination is that any physical changes would occur at existing industrial or commercial sites. In addition, no new construction or major change to existing facilities, or stockpiling of additional materials or products outside of existing facilities, is expected to result. Likewise, additional light or glare would not be created since no light generating equipment would be required for implementation of the SCM. Therefore, no significant impacts adversely affecting existing scenic resources are anticipated to occur.

	Potentially Significant Impact	No Impact
XIV. CULTURAL RESOURCES. Would the proposal:		
a) Cause a substantial adverse change in the significance of a historical or archaeological resource as defined in CCR § 15064.5?	☐	☑
b) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☑
c) Disturb any human remains, including those interred outside a formal cemetery?	☐	☑

Discussion:
Significant adverse impacts to cultural resources are not expected because implementation of the proposed SCM would not require destruction or alteration of any buildings or sites with prehistoric, historic, archaeological, religious, or ethnic significance.

There are existing laws in place that are designed to protect and mitigate potential impacts to cultural resources. Should archaeological resources be found during the application of the SCM coatings to newly constructed structures or existing structures, the application of such coating would cease until a thorough archaeological assessment is conducted. Furthermore, the application of architectural coatings, in the vast majority of situations, would occur after construction where archaeological resources would have already been disturbed. The proposed SCM is, therefore, not anticipated to result in any activities or promote any programs that could have a significant adverse impact on cultural resources in the state.

	Potentially Significant Impact	No Impact
XV. RECREATION.		
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☑
c) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☑

Discussion:
No significant adverse impacts to recreational facilities are expected, for the same reasons outlined in Item I - Land Use and Planning, XIII - Aesthetics, and XIV - Cultural Resources.

	Potentially Significant Impact	No Impact
XVI. MANDATORY FINDINGS OF SIGNIFICANCE.		
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☑
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)	☑	☐
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☑	☐

Discussion:
As a result of the possible adverse effects on air quality, water, hazards, transportation/circulation, solid/hazardous wastes and public services, the proposed project has the potential to degrade the quality of the environment. Many of the impacts are individually limited, but could be cumulatively significant. There may be adverse human health impacts associated with exposure to both carcinogenic and noncarcinogenic toxic air contaminants. These potential human health impacts may occur individually, such as elevated exposure to toxic air contaminants, or cumulatively, if different environmental impacts reinforce each other. These impacts will be evaluated in detail in the Draft Program EIR.

APPENDIX A

CALIFORNIA AIR DISTRICT RESOURCE DIRECTORY

California Air District Resource Directory

AMADOR COUNTY APCD
(all of Amador County)
500 Argonaut Lane
Jackson, CA 95642-2310
APCO - Karen Huss
Deputy APCO - Jim Harris
E-Mail: amaair@cdepot.net
Phone: (209) 223-6406
Fax: (209) 223-6260
Burn Line: (209) 223-6246

ANTELOPE VALLEY APCD
(NE portion of Los Angeles County)
43301 Division St., Ste. 206
P.O. Box 4409
Lancaster, CA 93539-4409
APCO - Charles L. Fryxell
Deputy APCO - Eldon Heaston
Reg. Development - Eldon Heaston
Surveillance - Bob Ramirez
Stationary Source - Chris Collins
Compliance - Doug Macauley
Business Assistance - Cynthia Ravenstein
Public Information Officer - Violette Roberts
Administrative Services - Jean Bracy
Website: http://www.mdaqmd.ca.gov
E-Mail: fwohosky@mdaqmd.ca.gov
Phone: (661) 723-8070
Fax: (661) 723-3450

BAY AREA AQMD
(Alameda, Contra Costa, Marin,
Napa, San Francisco, San Mateo,
Santa Clara, W portion of Solano,
S portion of Sonoma counties)
939 Ellis Street
San Francisco, CA 94109-7714
APCO - Ellen Garvey
Phone: (415) 749-4970
Deputy APCO - Peter Hess
Phone: (415) 749-4971
Deputy APCO - Vacant
Phone: (415) 749-4943
Enforcement - Jim Guthrie
Phone: (415) 749-4787
Fiscal/Admin - Vacant
Phone: (415) 749-4955
Legal - Robert Kwong
Phone: (415) 749-4750
Permits - Bill de Boisblanc
Phone: (415) 749-4704
Business Assistance - Vicki Dvorak
Phone: (415) 749-4764
Tech. Services - Gary Kendall
Phone: (415) 749-4932
Plan./Research - Tom Perardi
Phone: (415) 749-4667
Public Info. - Teresa Lee
Phone: (415) 749-4900
Complaint Line
Phone: (800) 334-6367
Website: http://www.baaqmd.gov
E-Mail: webmaster@baaqmd.gov
Phone: (415)771-6000
Fax: (415) 928-8560

BUTTE COUNTY AQMD
(all of Butte County)
2525 Dominic Drive, Suite J
Chico, CA 95928-7184
APCO - Larry Odle
Business Assistance - Jim Wagoner
Website: http://www.dcn.davis.ca.us/~bluesky
E-Mail: aqmd@butteair.dcsi.net
Phone: (530)891-2882
Fax: (530) 891-2878

CALAVERAS COUNTY APCD
(all of Calaveras County)
Government Center
891 Mountain Ranch Rd.
San Andreas, CA 95249-9709
APCO - Jearl Howard
Deputy APCO - Lakhmir Grewal
Phone: (209) 754-6504
Fax: (209) 754-6521

COLUSA COUNTY APCD
(all of Colusa County)
100 Sunrise Blvd. #F
Colusa, CA 95932-3246
APCO - Harry Krug
Business Assistance - Carmen Brubacher
Website: http://www.dcn.davis.ca.us/~bluesky
E-Mail: ccair@mako.com
Phone: (530) 458-0590
Fax: (530) 458-5000

EL DORADO COUNTY APCD
(all of El Dorado County)
2850 Fairlane Ct., Bldg. C
Placerville, CA 95667-4100
APCO - Ron Duncan
Program Mgr. - Dennis Otani
Business Assistance - Dave Mehl
E-Mail: airpol@innercite.com
Phone: (530) 621-6662
Fax: (530) 642-1531

FEATHER RIVER AQMD
(all of Sutter and Yuba counties)
938 14th Street
Marysville, CA 95901-4149
APCO - Ken Corbin
Business Assistance - Terri Shirhall
Burn Line: (530) 741-6299
Website: http://www.dcn.davis.ca.us/~bluesky
E-Mail: fraqmd@yubacoe.k12.ca.us
Phone: (530) 634-7659
Fax: (530) 634-7660

GLENN COUNTY APCD
(all of Glenn County)
P.O. Box 351 (720 N. Colusa St.)
Willows, CA 95988-0351
APCO - Ed Romano
Technical/Business Assistance -
Kevin Tokunaga, Rick Steward
Website: http://www.dcn.davis.ca.us/~bluesky
E-Mail: gcairag@maxinet.com
Phone: (530) 934-6500
Fax: (530) 934-6503

GREAT BASIN UNIFIED APCD
(all of Alpine, Inyo, and Mono counties)
157 Short Street, Suite 6
Bishop, CA 93514-3537
APCO - Dr. Ellen Hardebeck
Deputy APCO and Business Assistance -
Duane Ono
District Counsel - Brian Lamb
Phone: (760) 872-8211
Fax: (760) 872-6109

IMPERIAL COUNTY APCD
(all of Imperial County)
150 South 9th Street
El Centro, CA 92243-2801
AQCO - Stephen Birdsall
Deputy AQCO - Jeannette Bryant
Phone: (760) 339-4606
E-Mail: ICAPCD@quix.net
Phone: (760) 339-4314
Fax: (760) 353-9420

KERN COUNTY APCD
(E portion of Kern County)
2700 "M" Street, Suite 302
Bakersfield, CA 93301-2370
APCO - Thomas Paxson, P.E.
E-Mail: kcapcd@co.kern.ca.us
Phone: (661)862-5250
Fax: (661) 862-5251

LAKE COUNTY AQMD
(all of Lake County)
885 Lakeport Blvd.
Lakeport, CA 95453-5405
APCO - Robert L. Reynolds
Burn Line: (707) 263-3121
E-Mail: bobr@pacific.net
Phone: (707) 263-7000
Fax: (707) 263-0421

LASSEN COUNTY APCD
(all of Lassen County)
175 Russell Avenue
Susanville, CA 96130-4215
APCO - Kenneth R. Smith
Phone: (530) 251-8110
Fax: (530) 257-6515

MARIPOSA COUNTY APCD
(all of Mariposa County)
P.O. Box 2039 (5101 Jones St.)
Mariposa, CA 95338-2039
APCO - Ed Johnson
Phone: (209) 966-5151
Fax: (209) 742-5024

MENDOCINO COUNTY AQMD
(all of Mendocino County)
306 E. Gobbi St.
Ukiah, CA 95482-5511
Interim APCO - Philip Towle
E-Mail: mcaqmd@pacific.net
Phone: (707) 463-4354
Fax: (707) 463-5707

MODOC COUNTY APCD
(all of Modoc County)
202 West 4th Street
Alturas, CA 96101-3915
Interim APCO - Joe Moreo
Technician - Lynn Smith
Phone: (530)233-6419
Fax: (530) 233-5542

MOJAVE DESERT AQMD
(N portion of San Bernardino County,
E portion of Riverside County)
15428 Civic Drive, Suite 200
Victorville, CA 92392-2383
APCO - Charles L. Fryxell
Deputy APCO - Eldon Heaston
Reg. Development - Eldon Heaston
Surveillance - Bob Ramirez
Stationary Source - Bob Zeller
Compliance - Doug Macauley
Business Assistance - Cynthia Ravenstein
Public Information Officer - Violette Roberts
Administrative Services - Jean Bracy
Website: http://www.mdaqmd.ca.gov
E-Mail: pio@mdaqmd.ca.gov
Phone: (760) 245-1661
Fax: (760) 245-2699

MONTEREY BAY UNIFIED APCD
(all of Monterey, San Benito,
Santa Cruz counties)
24580 Silver Cloud Ct.
Monterey, CA 93940-6536
APCO - Doug Quetin
District Counsel - David Schott
Engineering and Business Assistance -
Fred Thoits
Rule Development - Amy Taketomo
Planning - Janet Brennan
Air Monitoring - John Fear
Compliance - Ed Kendig, Esq.
Source Testing - Larry Borelli
Administrative Services - Bill Fergus
E-Mail: dquetin@mbuapcd.org
Phone: (831) 647-9411
Fax: (831) 647-8501

NORTH COAST UNIFIED AQMD
(all of Del Norte, Humboldt, Trinity counties)
2300 Myrtle Avenue
Eureka, CA 95501-3327
APCO - Wayne Morgan
Engineering - Bob Clark
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E-Mail: ncuaqmd@northcaost.com
Phone: (707) 443-3093
Fax: (707) 443-3099

NORTHERN SIERRA AQMD
(all of Nevada, Plumas, Sierra counties)
200 Litton Dr., Suite 320 P.O. Box 2509
Grass Valley, CA 95945-2509
APCO - Rod Hill
Website: http://www.nccn.net/~nsaqmd
E-Mail: nsaqmd@nccn.net
Phone: (530) 274-9360
Fax: (530) 274-7546

NORTHERN SONOMA COUNTY APCD
(N portion of Sonoma County)
150 Matheson Street
Healdsburg, CA 95448-4908
APCO - Barbara Lee
E-Mail: nsc@sonic.net
Phone: (707) 433-5911
Fax: (707) 433-4823

PLACER COUNTY APCD
(all of Placer County)
DeWitt Center
11464 "B" Ave.
Auburn, CA 95603-2603
APCO - Richard Johnson
Website: http://www.dcn.davis.ca.us/~bluesky
E-Mail: placerapcd@foothill.net
Phone: (530) 889-7130
Fax: (530) 889-7107

SACRAMENTO METRO AQMD
(all of Sacramento County)
8411 Jackson Rd.
Sacramento, CA 95826-3904
APCO - Norman D. Covell
Phone: (916) 386-6183
Executive Asst./Clerk of the
Board - Lynda Holt
Phone: (916) 386-6182
District Counsel - Cathy Spinelli
Phone: (916) 386-6644
Rules - Aleta Kennard
Phone: (916) 386-6179
Stationary Sources - Dave Grose
Phone: (916) 386-7031
Field Operations - Eric Munz
Phone: (916) 386-6617
Permitting - Bruce Nixon
Phone: (916) 386-6623
Prog. Coord.- Brigette Tollstrup
Phone: (916) 386-6672
Strategic Planning - Karen Wilson
Phone: (916) 386-6667
Public Information - Kerry Shearer
Phone: (916) 386-6180
Mobile Sources - Tim Taylor
Phone: (916) 386-7042
Administration - Lashelle Dozier
Phone: (916) 386-7004
Websites: http://www.airquality.org or
http://www.sparetheair.com
Phone: (916) 386-6650

Fax: (916) 386-6674

SAN DIEGO COUNTY APCD
(all of San Diego County)
9150 Chesapeake Dr.
San Diego, CA 92123-1096
APCO - Richard J. Sommerville
Secretary - Nancy Torregrosa
Phone: (619) 694-3302
Assistant Director - Richard J. Smith
Phone: (619) 694-3303
Chief, Air Poll. Control - Linda Fox
Phone: (619) 694-3306
Compliance - Teresa Morris
Phone: (619) 694-3342
Business Assistance - Karen Wilkins
Phone: (619) 495-5106
Mon./Tech Services - Judith Lake
Phone: (619) 694-3351
Engineering - Michael Lake
Phone: (619) 694-3313
Air Res. & Strat. Development - Rob Reider
Phone: (619) 694-8852
Public Information - Anita Tinsley
Phone: (619) 694-3325
Website: http://www.sdapcd.co.san-diego.ca.us
Phone: (619) 694-3300
Fax: (619) 694-2730

SAN JOAQUIN VALLEY UNIFIED APCD
(all of Fresno, Kings, Madera,
Merced,San Joaquin, Stanislaus,
Tulare, and W portion of Kern counties)
1990 Gettysburg Ave.
Fresno, CA 93726
APCO - David L. Crow
Deputy APCO - Mark Boese
Planning - Robert Dowell
Permitting and Business Assistance -
Seyed Sadredin
Compliance - Bob Kard
District Counsel - Philip M. Jay
Administrative Services - Roger McCoy
Public Information/Education - Josette Bello
Bakersfield Office
2700 M Street, Suite 275
Phone: (661) 326-6900
Fax: (661) 326-6985
Bakersfield, CA 93301-2370
Modesto Office
Phone: (209) 545-7000
Fax: (209) 545-8652
4230 Kiernan Ave., Ste. 130
Modesto, CA 95356-9321
E-Mail: sjvuapcd@psnw.com
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SAN LUIS OBISPO COUNTY APCD
(all of San Luis Obispo County)
3433 Roberto Court
San Luis Obispo, CA 93401-7126
APCO - Robert W. Carr
Planning - Larry Allen
Public Information - Kathy Wolff
Engineering - David Dixon
Compliance - Karen Brooks
Business Assistance - Dean Carlson
Monitoring/Technical Services - Paul Allen
Toxics - Tom Roemer
Website: http://www.sloapcd.dst.ca.us
E-Mail: cleanair@sloapcd.dst.ca.us
Phone: (805) 781-4AIR
Phone: (805) 781-5912
Fax: (805) 781-1002

SANTA BARBARA COUNTY APCD
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26 Castilian Dr. Suite B-23
Goleta, CA 93117-3027
APCO - Doug Allard
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Technology & Env. Assessment - Kathy Patton
Phone: (805) 961-8852
Administrative Services - John Nicholas
Phone: (805) 961-8854
General Source - Peter Cantle
Phone: (805) 961-8927
Major Source - Terry Dressler
Phone: (805) 961-8929
Public Information - Bobbie Bratz
Phone: (805) 961-8920
Clerk of the Board
Phone: (805) 568-2245
Business/Community Assistance -
Frances Gilliland
Phone: (805) 961-8868
Complaints
Phone: (805) 961-8800
Daily Air Quality Reports
Phone: (805) 961-8804
Newsletter Subscriptions
Phone: (805) 961-8867
Other Subscriptions (rules, notices)
Phone: (805) 961-8911
Website: http://www.sbcapcd.org
E-Mail: apcd@sbcapcd.org
Phone: (805) 961-8800
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1855 Placer Street, Ste. 101
Redding, CA 96001-1759
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(all of Siskiyou County)
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SOUTH COAST AQMD
(Los Angeles County except
for Antelope Valley APCD, Orange County,
W portion of San Bernardino and
W portion of Riverside counties)
21865 E. Copley Dr.
Diamond Bar, CA 91765-4182
Note: All AQMD phone numbers begin with (909) 396 -
Executive Officer - Dr. Barry Wallerstein - 2100
Engineering & Compliance - Carol Coy - 2434
Planning, Rule Dev. & Area Sources - Jack Broadbent - 3789
Public Affairs & Transportation Programs - Lupe Valdez - 3780
Science & Technology Advancement - Dr. Chung S. Liu - 2103
Public Advisor - La Ronda Bowen - 3235
Business Assistance - Larry Kolczak - 3215
Communications - Tom Eichhorn - 3240
Finance - Rick Pearce - 2828
General Counsel - Peter Greenwald - 2303
Information Management - Chris Marlia - 3148
Human Resources - Eudora Tharp - 3018
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TUOLUMNE COUNTY APCD
(all of Tuolumne County)
22365 Airport
Columbia, CA 95310
Send mail to: 2 South Green Street
Sonora, CA 95370-4618
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Phone: (805) 645-1410
Engineering Division - Karl Krause
Phone: (805) 645-1420
Information Systems Division - Juli Cromer
Phone: (805) 645-1484
Business Assistance - Kerby Zozula
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Rules and Technology Advancement Div. - Mike Villegas
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Engineering - Steve Speckert
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Board Clerk - Eleanora Kolster
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APPENDIX B

SUMMARY OF CURRENT DISTRICT RULES & VOC LIMITS

Summary of California Architectural Coating Rules

Volatile Organic Compound (VOC) Limits (grams per liter)

NOTE: This summary is provided for comparison purposes ONLY and should not be used as a replacement for existing rules.

No attempt was made to merge similar categories among different rules.

Coating	EPA	CARB	Antelope	Bay Area	Butte	Colusa	El Dorado	Feather River	Imperial	Kern	Mojave	Monterey	Placer	Sacramento	San Diego	San Joaquin	Santa Barbara	South Coast	Ventura
Rule Name or Number	63 FR 176: 48848	SCM	1113	8-3	240	2.26	215	3.15	424	410.1	1113	426	218	442	67	4601	323	1113	74.2
Acrylic Polymers (Industrial Maintenance)			420	420															
Alkyds (Industrial Maintenance)			420	420															
Antenna	530												TBD						
Anti-Fouling	450												TBD						
Anti-Graffiti (Industrial Maintenance)	600	340					340		340	420	600		340	340	600	340	340		340
Bituminous and Mastics	500												TBD						
Bituminous Coating Materials (Industrial Maintenance)			420	420															
Bituminous Roof Coatings																		300 [250 7/1/2002]	
Bond Breakers	600	350	350	E	E	E	350	E	350	350	350	E	350	350	350	350	350	350	350
Calcimine Recoaters	475																		
Catalyzed Epoxy (Industrial Maintenance)			420	420															
Chalkboard Resurfacers	450												350						
Chemical Storage Tank Coatings																		420 [100 7/1/2006]	
Chlorinated Rubber (Industrial Maintenance)			420	420															
Concrete Curing Compounds	350	350	350	350	800	350	350	350	350	350	350	350	350	350	350	350	350	350	350
Concrete Curing and Sealing Compounds	700																		
Concrete Protective	400												TBD						
Concrete Surface Retarders	780																		
Conversion Varnishes	725																		
Dry Fog	400	400	400	E	E	E	400	E	400	400	400	E	400	400	400	400	400	400	400
Enamel Undercoaters				350	550	350		350		350		350				350			
Essential Public Service Coatings																		420 [340 7/1/2002] [100 7/1/2006]	
Extreme High Durability	800												TBD						
Faux Finishing/Glazing (Japans)	700		350															350	
Fire Proofing, Exterior			350															350	
Fire Retardant, Clear		650	650	E	E	E	650	E	650	650	650			650	650	650	650	650	650
Fire Retardant, Pigmented		350	350	E	E	E	350	E	350	350	350			350	350	350	350	350	350
Fire Retardant/Resistive, Clear	850											E	650						
Fire Retardant/Resistive, Opaque	450											E	350						

Coating	EPA	CARB	Antelope	Bay Area	Butte	Colusa	El Dorado	Feather River	Imperial	Kern	Mojave	Monterey	Placer	Sacramento	San Diego	San Joaquin	Santa Barbara	South Coast	Ventura
Rule Name or Number	63 FR 176: 48848	SCM	1113	8-3	240	2.26	215	3.15	424	410.1	1113	426	218	442	67	4601	323	1113	74.2
Flats, Exterior	250	(250)	250 [100 7/1/2001] [50 7/1/2008]	(250)	250	(250)	(250)	(250)	(250)	(250)	(250)	(250)	250	(250)	(250)	(250)	(250)	250 [100 7/1/2001] [50 7/1/2008]	(250)
Flats, Interior	250	(250)	250 [100 7/1/2001] [50 7/1/2008]	(250)	250	(250)	(250)	(250)	(250)	(250)	(250)	(250)	250	(250)	(250)	(250)	(250)	250 [100 7/1/2001] [50 7/1/2008]	(250)
Flats, Specialty				400	650	400	400	400		400		400		400		400	250		
Floor	400												TBD					420 [100 7/1/2002] [50 7/1/2006]	
Flow	650												TBD						
Form Release Compounds	450	250					250		250	250			250	250	250	250	250		250
Graphic Arts (Sign Paints)	500	500	500	E	E	E	500	E	500	500	500	E	500	500	500	500	500	500	500
Heat Reactive	420												TBD						
High Temperature	650												420						
High Temperature (Industrial Maintenance)		420					420		420	420	550			420	650	420	420	[550 7/1/2002] [420 7/1/2006]	420
Impacted Immersion	780												TBD						
Industrial Maintenance	450	340							340	420	420		420	340	420	340	340	420 [250 7/1/2002] [100 7/1/2006]	
Industrial Maintenance Primers and Topcoats					800	420	420	420				420							420
Inorganic Polymers (Industrial Maintenance)			420	420															
Lacquers, Clear		680	550 [275 1/1/2005]	680	800	680	680	680	680	680	680	680		680	680	680	350	550 [275 1/1/2005]	680
Lacquers (Including Lacquer Sanding Sealers)	680												680						
Lacquers, Pigmented			550 [275 1/1/2005]				680											550 [275 1/1/2005]	680
Low Solids Coatings			120	120												120		120	
Low Solids Stains	120						120						120						
Low Solids Wood Preservatives	120						120						120						
Magnesite Cement	600	450	450				450		450	450	600		450	450	600	450	450	450	450
Mastic Texture	300	300	300	E	E	E	300	E	300	300	300	E	300	300	300	300	300	300	300
Metallic Pigmented	500	500	500	E	E	E	500	E	500	500	500	E	500	500	500	500	500	500	500
Multi-Color	580	420	250	E	E	E	420	E	420	420	580	E	420	420	580		420	250	420
Nonferrous Ornamental Metal Lacquers and Surface Protectants	870												TBD						

Coating	EPA	CARB	Antelope	Bay Area	Butte	Colusa	El Dorado	Feather River	Imperial	Kern	Mojave	Monterey	Placer	Sacramento	San Diego	San Joaquin	Santa Barbara	South Coast	Ventura
Rule Name or Number	63 FR 176: 48848	SCM	1113	8-3	240	2.26	215	3.15	424	410.1	1113	426	218	442	67	4601	323	1113	74.2
Non Flats, Interior	380	250	250	250	380	250	(250)	(250)	(250)	(250)	(250)	(250)	250	(250)	(250)	(250)	(250)	250 [150 7/1/2002] [50 7/1/2006]	(250)
Non Flats, Exterior	380	250	250	250	380	250	(250)	(250)	(250)	(250)	(250)	(250)	250	(250)	(250)	(250)	(250)	250 [150 7/1/2002] [50 7/1/2006]	(250)
Nuclear	450												TBD						
Pre-Treatment Wash Primers	780	420	780				675		420	420	780		675	420	780	420	420	780	420
Primers and Undercoaters	350												350						
Primers, Sealers, and Undercoaters, General		350	350	350	550	350	350	350	350	350	350	350		350	350	350	350	350 [200 7/1/2002] [100 7/1/2006]	350
Primers, Sealers, and Undercoaters, Specialty				350	550	350	350	350				350							
Quick Dry Enamels	450		400	400	650	400	400	400		400	400	400	400	400	400	400	250	400 [250 7/1/2002] [50 7/1/2006]	400
Quick Dry Primers and Sealers				E						450				450		450			
Quick Dry Primers, Sealers, and Undercoaters	450				E	E		E			450	E	350		525		350	350* [200 7/1/2002] [100 7/1/2006]	E
Recycled Coatings																		250 [100 7/1/2006]	
Repair and Maintenance Thermoplastic	650												650						
Roof	250	300	300	300	500	300	300	300	300	300	300	300	300	300	300	300	300	250	300
Rust Preventative	400												TBD					400 [100 7/1/2006]	
Sanding Sealers		350	350						350	350	550			350	550	350	350	350	
Sanding Sealers (Non-Lacquer)	550						350						350						350
Sealers (Including Clear Wood Sealers)	400												350						
Shellacs, Clear	730	730	730	E	E	E	730	E	730	730	730	E	730	730	730	730	730	730	730
Shellacs, Opaque	550			E	E	E		E				E	550						
Shellacs, Pigmented		550	550	E	E	E	550	E	550	550	550	E		550	550	550	550	550	550
Silicones (Industrial Maintenance)			420	420															
Specialty Primers																		350 [100 7/1/2006]	
Stains, Clear and Semitransparent	550		350										350					350 [250 7/1/2002]	
Stains, Semitransparent		350		350	700	350	350	350	350	350	350	350		350	350	350	350		350
Stains, Opaque	350	350	350	350	650	350	350	350	350	350	350	350	350	350	350	350	350	350 [250 7/1/2002]	350
Stain Controllers	720																		
Swimming Pool, General	600	340	340	E	E	E	340	E	340	340	650	E	340	340	650	340	340	340	340

Coating	EPA	CARB	Antelope	Bay Area	Butte	Colusa	El Dorado	Feather River	Imperial	Kern	Mojave	Monterey	Placer	Sacramento	San Diego	San Joaquin	Santa Barbara	South Coast	Ventura
Rule Name or Number	63 FR 176: 48848	SCM	1113	8-3	240	2.26	215	3.15	424	410.1	1113	426	218	442	67	4601	323	1113	74.2
Swimming Pool Repair & Maintenance		340	650				650		340	600	650			340	650	340	340	650	340
Thermoplastic Rubber and Mastics	550												TBD						
Tile-Like Glaze				E	E	E		E				E							
Traffic	150		150				250				250		250		250			150	250
Traffic, Applied to Other Surfaces		250		250	250	250		250	250	250	250	250		250		250	250		
Traffic, Applied to Public Streets and Highways		250		250	650	250		250	250	250		250		250		250	250		
Traffic, Black Traffic Coatings		250		250	650	250		250	250	250	650	250		250		250	250		
Unique Vehicles (Industrial Maintenance)			420	420															
Urethane Polymers (Industrial Maintenance)			420	420															
Varnishes	450	350	350	350	650	350	350	350	350	350	350	350	350	350	350	350	350	350	350
Vinyl Chloride Polymers (Industrial Maintenance)			420	420															
Waterproof Mastics				300	500	300		300		300		300			300	300			
Water Proofing Sealers		400	400	400	800	400	400	400	400	400	400	400		400	400	400	400		400
Waterproofing Sealers, Wood																		400 [250 7/1/2002]	
Waterproofing Sealers, Concrete/Masonry																		400	
Water Proofing Sealers and Treatments, Clear	600												400						
Water Proofing Sealers and Treatments, Opaque	600												400						
Wood Preservatives, Below Ground	550	350	350	E	E	E	350	E	350	350	600	E	350	350	600	350	350	350	350
Wood Preservatives, Clear and Semitransparent	550	350	350	350	700	350	350	350	350	350	350	350	350	350	350	350	350	350	350
Wood Preservatives, Opaque	350	350	350	350	650	350	350	350	350	350	350	350	350	350	350	350	350	350	350
Zone Marking	450																		
Adopted	Sep 98	May 89	Jul 97	Mar 78	July 79	1979	Sep 94	June 91	Nov 82	Apr 72	Feb 79	May 79	Jun 79	Dec 78	Nov 77	Apr 91	Oct 71	Sep 77	Jun 79
Last Amended				Nov 98	Apr 96	May 91	Sep 94	May 96	Jan 90	May 97	Nov 92	Dec 96	Aug 97	Sep 96	May 96	Sep 97	Jul 96	May 99	Aug 92

Coating	EPA	CARB	Antelope	Bay Area	Butte	Colusa	El Dorado	Feather River	Imperial	Kern	Mojave	Monterey	Placer	Sacramento	San Diego	San Joaquin	Santa Barbara	South Coast	Ventura
Rule Name or Number	63 FR 176: 48848	SCM	1113	8-3	240	2.26	215	3.15	424	410.1	1113	426	218	442	67	4601	323	1113	74.2
Notes:																			
*The specified limit applies unless the manufacturer submits a report pursuant to Rule 1113 (g)(2).																			
Yolo-Solano Rule 2.14, Architectural Coatings, was adopted by the ARB on July 26, 1979 (ARB Resolution 79-63). Some provisions of the rule are outdated.																			
E means that the district rule specifically exempts this category from VOC limits.																			
TBD means the VOC limit will be assigned at a later date, pending adoption of the EPA national rule.																			
District rules (except for Butte) and the ARB SCM state that a coating's VOC limit is 250 grams per liter, with the exception of categories listed in the above table.																			
Parentheses indicate VOC limits that apply due to the 250 grams per liter default provision, but the limits are not specifically stated in the rule.																			
Brackets indicate future effective VOC limits.																			
The EPA rule states that if a coating is not defined in the table above, it falls into the flat or nonflat category based on the gloss level, and the applicable limit applies.																			
s:\cpbjob\coatings\usepa\summary.xls (revised 6/10/99)																			

APPENDIX C

SUGGESTED CONTROL MEASURE FOR ARCHITECTURAL COATINGS

xxx 1999

California Air Resources Board (ARB)
Suggested Control Measure for Architectural Coatings

RULE _____ ARCHITECTURAL COATINGS

1. APPLICABILITY

1.1 Except as provided in subsection 1.2, the provisions of this rule are applicable to any person who supplies, sells, offers for sale, applies, or solicits the application of any architectural coating, or who manufactures any architectural coating for use within the District.

1.2 The provisions of this rule do not apply to any architectural coating described in subsections 1.2.1 through 1.2.3:

1.2.1 A coating that is manufactured for use outside of the District or for shipment to other manufacturers for repackaging.

1.2.2 A coating that is an aerosol product.

1.2.3 A coating that is sold in a container with a volume of one liter or less.

2. DEFINITIONS

2.0 Adhesive: Any chemical substance that is applied for the purpose of bonding two surfaces together other than by mechanical means.

2.1 Aerosol Product: A pressurized spray system that dispenses product ingredients by means of a propellant or mechanically induced force. "Aerosol Product" does not include pump sprays.

2.2 Appurtenance: Any accessory to a stationary structure coated at the site of installation, whether installed or detached, including but not limited to: bathroom and kitchen fixtures; cabinets; concrete forms; doors; elevators; fences; hand railings; heating equipment, air conditioning equipment, and other fixed mechanical equipment or stationary tools; lampposts; partitions; pipes and piping systems; rain gutters and downspouts; stairways, fixed ladders, catwalks, and fire escapes; and window screens.

2.3 Architectural Coating: A coating recommended for application to stationary structures and their appurtenances at the site of installation, to portable buildings at the site of installation, to pavements, or to curbs. Coatings applied in shop applications or to non-

stationary structures such as airplanes, ships, boats, railcars, and automobiles, and adhesives are not considered architectural coatings for the purposes of this rule.

2.4 Bituminous Coating: A coating formulated and recommended for roofing, pavement sealing, or waterproofing that incorporates bitumens. Bitumens are black or brown materials including, but not limited to, asphalt, tar, pitch, and asphaltite that are soluble in carbon disulfide, consist mainly of hydrocarbons, and are obtained from natural deposits or as residues from the distillation of crude petroleum or coal.

2.5 Bond Breaker: A coating formulated and recommended for application between layers of concrete to prevent a freshly poured top layer of concrete from bonding to the layer over which it is poured.

2.6 Clear Wood Coatings: Clear and semi-transparent coatings, including lacquers and varnishes, applied to wood substrates to provide a transparent or translucent solid film.

2.7 Coating: A material applied onto or impregnated into a substrate for protective, decorative, or functional purposes. Such materials include, but are not limited to, paints, varnishes, sealers, and stains.

2.8 Colorant: A concentrated pigment dispersion in water, solvent, and/or binder that is added to an architectural coating in a paint store or at the site of application to produce the desired color.

2.9 Concrete Curing Compound: A coating formulated and recommended for application to freshly poured concrete to retard the evaporation of water.

2.10 Dry Fog Coating: A coating formulated and recommended only for spray application such that overspray droplets dry before subsequent contact with incidental surfaces in the vicinity of the surface coating activity.

2.11 Exempt Solvent: A compound identified as exempt under the definition of Volatile Organic Compounds (VOC), subsection 2.43.

2.12 Fire-Retardant Coating: A coating formulated and recommended to have a flame spread index of less than 25 when tested in accordance with American Society for Testing and Materials (ASTM) Designation E-84-87, “Standard Test Method for Surface Burning Characteristics of Building Material,” after application to Douglas fir according to the manufacturer’s recommendations (incorporated by reference--see section 5).

2.13 Flat Coating: A coating that is not defined under any other definition in this rule and that registers gloss less than 15 on an 85-degree meter or less than 5 on a 60-degree meter according to ASTM Designation D 523-89, Standard Test Method for Specular Gloss (incorporated by reference--see section 5.).

2.14 Floor Coating: An opaque coating that is formulated and recommended for application to flooring including, but not limited to, decks, porches, and steps, for the purposes of abrasion resistance.

2.15 Form-Release Compound: A coating formulated and recommended for application to a concrete form to prevent the freshly poured concrete from bonding to the form. The form may consist of wood, metal, or some material other than concrete.

2.16 Graphic Arts Coating or Sign Paint: A coating formulated and recommended for hand-application by artists using brush or roller techniques to indoor and outdoor signs (excluding structural components) and murals including lettering enamels, poster colors, copy blockers, and bulletin enamels.

2.17 High-Temperature Coating: A high performance coating formulated, recommended, and used for application to substrates exposed continuously or intermittently to temperatures above 204°C (400°F).

2.18 Industrial Maintenance Coating: A high performance architectural coating, including primers, sealers, undercoaters, intermediate coats, and topcoats, formulated and recommended for application to substrates exposed to one or more of the following extreme environmental conditions listed in subsections 2.18.1 through 2.18.5 in an industrial, commercial, or institutional setting :

2.18.1 Immersion in water, wastewater, or chemical solutions (aqueous and non-aqueous solutions), or chronic exposure of interior surfaces to moisture condensation;

2.18.2 Acute or chronic exposure to corrosive, caustic or acidic agents, or to chemicals, chemical fumes, or chemical mixtures or solutions;

2.18.3 Repeated exposure to temperatures above 121°C (250°F);

2.18.4 Repeated (frequent) heavy abrasion, including mechanical wear and repeated (frequent) scrubbing with industrial solvents, cleansers, or scouring agents; or

2.18.5 Exterior exposure of metal structures and structural components.

2.19 Lacquer: A clear or opaque wood coating, including clear lacquer sanding sealers, formulated with cellulosic or synthetic resins to dry by evaporation without chemical reaction and to provide a solid, protective film. Lacquer stains are considered stains, not lacquers.

2.20 Low Solids Coating: A coating containing 0.12 kilogram or less of solids per liter (1 pound or less of solids per gallon) of coating material and for which at least half of the volatile component is water.

2.21 Magnesite Cement Coating: A coating formulated and recommended for application to magnesite cement decking to protect the magnesite cement substrate from erosion by water.

2.22 Mastic Texture Coating: A coating formulated and recommended to cover holes and minor

cracks and to conceal surface irregularities, and is applied in a single coat of at least 10 mils (0.010 inch) dry film thickness.

2.23 Metallic Pigmented Coating: A coating containing at least 48 grams of elemental metallic pigment per liter of coating as applied (0.4 pounds per gallon), excluding zinc.

2.24 Multi-Color Coating: A coating that is packaged in a single container and exhibits more than one color when applied.

2.25 Nonflat Coating: A coating that is not defined under any other definition in this rule and that registers a gloss of 15 or greater on an 85-degree meter or 5 or greater on a 60-degree meter according to ASTM Designation D 523-89, Standard Test Method for Specular Gloss (incorporated by reference--see section 5.).

2.26 Pre-treatment Wash Primer: A primer that contains a minimum of 0.5 percent acid, by weight, that is formulated and recommended for application directly to bare metal surfaces to provide corrosion resistance and to promote adhesion of subsequent topcoats.

2.27 Primer: A coating formulated and recommended for application to a substrate to provide a firm bond between the substrate and subsequent coats.

2.28 Quick-Dry Enamel: A nonflat coating that has the following characteristics:

2.28.1 Is capable of being applied directly from the container under normal conditions with ambient temperatures between 16 and 27°C (60 and 80°F);

2.28.2 When tested in accordance with ASTM Designation D 1640-83 (Reapproved 1989), Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature (incorporated by reference--see section 5.), sets to touch in 2 hours or less, is tack free in 4 hours or less, and dries hard in 8 hours or less by the mechanical test method; and

2.28.3 Has a dried film gloss of 70 or above on a 60 degree meter.

2.29 Residential Use: Use in areas where people reside or lodge including, but not limited to, single and multiple family dwellings, condominiums, mobile homes, apartment complexes, motels, and hotels.

2.30 Roof Coating: A coating formulated and recommended for application to exterior roofs for the primary purpose of preventing penetration of the substrate by water or reflecting heat and reflecting ultraviolet radiation. Metallic pigmented roof coatings which qualify as metallic pigmented coatings shall not be considered to be in this category, but shall be considered to be in the metallic pigmented coatings category.

2.31 Rust Preventative Coating: A coating formulated and recommended for use in preventing the corrosion of ferrous metal surfaces in residential situations.

2.32 Sanding Sealer: A clear wood coating formulated and recommended for application to bare

wood to seal the wood and to provide a coat that can be sanded to create a smooth surface. A sanding sealer that also meets the definition of a lacquer is not included in this category, but is included in the lacquer category.

2.33 Sealer: A coating formulated and recommended for application to a substrate for one or more of the following purposes: to prevent subsequent coatings from being absorbed by the substrate; to prevent harm to subsequent coatings by materials in the substrate; to block stains, odors, or efflorescence; to seal fire, smoke, or water damage; or to condition chalky surfaces.

2.34 Shellac: A clear or opaque coating formulated with natural resins (except nitrocellulose resins) soluble in alcohol (including, but not limited to, the resinous secretions of the lac beetle, Laciffer lacca). Shellacs dry by evaporation without chemical reaction and provide a quick-drying, solid protective film that may be used for blocking stains.

2.35 Solicit: To require for use or to specify, by written or oral contract.

2.36 Shop Application: A coating is applied to a product or a component of a product in a factory or shop as part of a manufacturing, production, or repairing process (e.g., original equipment manufacturing coatings).

2.37 Stain: A coating formulated to change the color of a surface but not conceal the surface. This includes lacquer stains.

2.38 Swimming Pool Coating: A coating formulated and recommended to coat the interior of swimming pools and to resist swimming pool chemicals.

2.39 Tint Base: A coating to which colorant is added in a paint store or at the site of application to produce a desired color.

2.40 Traffic Marking Coating: A coating formulated and recommended for marking and striping streets, highways, or other traffic surfaces including, but not limited to, curbs, berms, driveways, parking lots, sidewalks, and airport runways.

2.41 Undercoater: A coating formulated and recommended to provide a smooth surface for subsequent coatings.

2.42 Varnish: A clear or semi-transparent coating, excluding lacquers and shellacs, formulated and recommended to provide a durable, solid, protective film. Varnishes may contain small amounts of pigment to color a surface, or to control the final sheen or gloss of the finish.

2.43 Volatile Organic Compound (VOC): Any compound of carbon, which may be emitted to the atmosphere during the application of and or subsequent drying or curing of coatings subject to this rule, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic

carbides or carbonates, and ammonium carbonate, and excluding the following:

2.43.1 methane;
methylene chloride (dichloromethane);
1,1,1-trichloroethane (methyl chloroform);
trichlorofluoromethane (CFC-11);
dichlorodifluoromethane (CFC-12);
1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113);
1,2-dichloro-1,1,2,2-tetrafluoroethane (CFC-114);
chloropentafluoroethane (CFC-115);
chlorodifluoromethane (HCFC-22);
1,1,1-trifluoro-2,2-dichloroethane (HCFC-123);
2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124);
1,1-dichloro-1-fluoroethane (HCFC-141b);
1-chloro-1,1-difluoroethane (HCFC-142b);
trifluoromethane (HFC-23);
pentafluoroethane (HFC-125);
1,1,2,2-tetrafluoroethane (HFC-134);
1,1,1,2-tetrafluoroethane (HFC-134a);
1,1,1-trifluoroethane (HFC-143a);
1,1-difluoroethane (HFC-152a);
cyclic, branched, or linear completely methylated siloxanes;
the following classes of perfluorocarbons:

(A) cyclic, branched, or linear, completely fluorinated alkanes;

(B) cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;

(C) cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and

(D) sulfur-containing perfluorocarbons with no unsaturations and with the sulfur bonds only to carbon and fluorine; and

2.43.2 the following low-reactive organic componds which have been exempted by the U.S. EPA:

acetone;
ethane; and
parachlorobenzotrifluoride (1-chloro-4-trifluoromethyl benzene).

2.44 VOC Content: The weight of VOC per volume of coating, calculated according to the procedures in subsection 5.1.

2.45 Waterproofing Wood Sealer: A coating formulated and recommended for application to a wood substrate for the primary purpose of preventing the penetration of water.

2.46 Waterproofing Concrete/Masonry Sealer: A clear or pigmented coating that is formulated for sealing concrete and masonry to provide resistance against water, alkalis, acids, ultraviolet light, and staining.

2.47 Wood Preservative: A coating formulated and recommended to protect wood from decay

or insect attack, and which contains a wood preservative chemical that is registered with the United States Environmental Protection Agency (U.S. EPA) under the Federal Insecticide, Fungicide, and Rodenticide Act (7 United States Code (U.S.C.) Section 136, *et seq.*) and that is registered with the California Department of Pesticide Regulation.

3. STANDARDS

3.1 **VOC Content Limits:** Except as provided in subsections 3.2 and 3.3, no person shall, within the District, supply, offer for sale, sell, apply, or solicit the application of any architectural coating listed in Table 1 which contains VOC (less water and exempt solvents, and excluding any colorant added to tint bases) in excess of the corresponding limit specified in the table, after the corresponding date specified, or manufacture, blend, or repackage such a coating for use within the District.

3.2 **Most Restrictive VOC Limit:** If anywhere on the container of any architectural coating, or any label or sticker affixed to the container, or in any sales, advertising, or technical literature supplied by a manufacturer or anyone acting on their behalf, any representation is made that indicates that the coating meets the definition of or is recommended for use for more than one of the coating categories listed in Table 1, then the most restrictive VOC content limit shall apply. This provision does not apply to subsections 3.2.1 through 3.2.6:

3.2.1 Lacquer sanding sealers are subject only to the VOC content limit in Table 1 for lacquers.

3.2.2 Metallic pigmented coatings that meet the definition of or are recommended for use as roof coatings, industrial maintenance coatings, or primers are subject only to the VOC content limit in Table 1 for metallic pigmented coatings.

3.2.3 Shellacs that meet the definition of or are recommended for use as any other architectural coating are subject only to the VOC content limit in Table 1 for shellacs.

3.2.4 Pre-treatment wash primers that meet the definition of or are recommended for use as primers or that meet the definition for industrial maintenance coatings are subject only to the VOC content limit in Table 1 for pre-treatment wash primers.

3.2.5 Industrial maintenance coatings that meet the definition of or are recommended for use as primers, sealers, undercoaters, or mastic texture coatings are subject only to the VOC content limit in Table 1 for industrial maintenance coatings.

3.2.6 High temperature coatings that meet the definition of or are recommended for use as industrial maintenance coatings are subject only to the VOC content limit in Table 1 for high temperature coatings.

3.3 **Sell-Through Provision:** Sale of a coating manufactured prior to the effective date of the corresponding standard in Table 1, and not complying with that standard, shall not constitute a violation of subsection 3.1 until three years after the effective date of the standard, nor shall application of such a coating.

3.4 **Painting Practices:** All architectural coating containers used to apply the contents therein to a surface direct from said container by pouring, siphoning, brushing, rolling, padding, ragging or other means, shall be closed when not in use. These architectural coating containers include, but should not be limited to, drums, buckets, cans, pails, trays or other application containers. Containers of VOC-containing materials for thinning and cleanup shall also be closed when not in use. "Not in use" includes, but is not limited to, interruption, delay, completion of transfer of said contents, or termination of said application.

3.5 **Thinning:** Any person who applies or solicits the application of any architectural coating within the District shall follow the manufacturer's recommendation regarding thinning of the coating under normal environmental and application conditions as described in subsection 4.1.2. This recommendation shall not apply to the thinning of architectural coatings with water. No person who applies or solicits the application of any architectural coating shall apply a coating that is thinned to exceed the applicable VOC limit in Table 1.

3.6 **Industrial Maintenance Coatings:** Any person who applies or solicits the application of any architectural coating within the District shall follow the manufacturer's recommendation regarding industrial maintenance coatings as described in subsection 4.1.5. No person who applies or solicits the application of any architectural coating shall apply an industrial maintenance coating in or on a residence as defined in subsection 2.29 or in or on areas of industrial, commercial, or institutional facilities not exposed to the extreme environmental conditions identified in subsection 2.18, such as office space and meeting rooms.

3.7 **Coatings Not Listed in Table 1:** For any coating that cannot be classified as a category listed in Table 1, the VOC limit shall be determined by classifying the coating as a flat coating or a nonflat coating, based on its gloss, as defined in subsections 2.13 and 2.25, and the corresponding flat or nonflat VOC limit shall apply.

4. CONTAINER LABELING REQUIREMENTS

4.1 Each manufacturer of any architectural coating subject to the provisions of this subsection shall provide the information listed in subsections 4.1.1 through 4.1.5 on the coating container in which the coating is sold or distributed.

4.1.1 **Date Code:** The date the coating was manufactured, or a date code representing the date shall be indicated on the label, lid, or bottom of the container. Each manufacturer of such coatings shall file with the Air Pollution Control Officer and the Executive Officer of the California Air Resources Board (ARB), an

explanation of each code.

4.1.2 **Thinning Recommendations:** A statement of the manufacturer's recommendation regarding thinning of the coating shall be indicated on the label or lid of the container. This requirement does not apply to the thinning of architectural coatings with water. If thinning of the coating prior to use is not necessary, the recommendation must specify that the coating is to be applied without thinning.

4.1.3 **VOC Content:** Each container of any coating subject to this rule shall display the maximum VOC content of the coating, as applied, and after any thinning as recommended by the manufacturer. VOC content shall be displayed in grams of VOC per liter of coating (less water and exempt solvent, and excluding any colorant added to tint bases). VOC content displayed shall be calculated using product formulation data, or shall be determined using the test methods in subsection 5.2. The equations in subsection 5.1 shall be used to calculate VOC content.

4.1.4 **Coating Category Designation:** Each container of any coating subject to this rule shall display on the label or lid of the container the applicable coating category with which the coating is required to comply, as listed in Table 1. Alternatively, this information shall be displayed on a product data sheet for the coating.

4.1.5 **Industrial Maintenance Coatings:** In addition to the information specified in subsection 4.1, each manufacturer of any industrial maintenance coating subject to the provisions of this subsection shall display on the label or lid of the container in which the coating is sold or distributed one or more of the descriptions listed in subsections 4.1.5.1 through 4.1.5.4.

4.1.5.1 "For industrial use only."

4.1.5.2 "For professional use only."

4.1.5.3 "Not for residential use" or "Not intended for residential use."

4.1.5.4 "This coating is intended for use under the following condition(s):" (Include each condition in subsections 4.1.5.4.1 through 4.1.5.4.5 that applies to the coating.)

- 4.1.5.4.1 Immersion in water, wastewater, or chemical solutions (aqueous and nonaqueous solutions), or chronic exposure of interior surfaces to moisture condensation;
- 4.1.5.4.2 Acute or chronic exposure to corrosive, caustic, or acidic agents, or to chemicals, chemical fumes, or chemical mixtures or solutions;
- 4.1.5.4.3 Repeated exposure to temperatures above 121°C (250°F);
- 4.1.5.4.4 Repeated (frequent) heavy abrasion, including mechanical wear and repeated (frequent)

scrubbing with industrial solvents, cleaners, or scouring agents; or

4.1.5.4.5 Exterior exposure of metal structures and structural components.

5. COMPLIANCE PROVISIONS AND TEST METHODS

5.1 **Calculation of VOC Content:** For the purpose of determining compliance with the VOC content limits in Table 1, the VOC content of a coating shall be determined by using the procedures described in subsection 5.1.1 or 5.1.2, as appropriate. The VOC content of a tint base shall be determined without colorant that is added after the tint base is manufactured.

5.1.1 With the exception of low solids coatings, determine the VOC content in grams of VOC per liter of coating thinned to the manufacturer's maximum recommendation, excluding the volume of any water and exempt compounds. Calculate the VOC content using equation 1 as follows:

$$\text{VOC Content} = \frac{(W_s - W_w - W_{ec})}{(V_m - V_w - V_{ec})} \qquad \textbf{(1)}$$

Where:

VOC content	=	grams of VOC per liter of coating
W_s	=	weight of volatiles, in grams
W_w	=	weight of water, in grams
W_{ec}	=	weight of exempt compounds, in grams
V_m	=	volume of coating, in liters
V_w	=	volume of water, in liters
V_{ec}	=	volume of exempt compounds, in liters

5.1.2 For low solids coatings, determine the VOC content in units of grams of VOC per liter of coating thinned to the manufacturer's maximum recommendation, including the volume of any water and exempt compounds. Calculate the VOC content using equation 2 as follows:

$$\text{VOC Content}_{ls} = \frac{(W_s - W_w - W_{ec})}{(V_m)} \qquad \textbf{(2)}$$

Where:

VOC content$_{ls}$	=	the VOC content of a low solids coating in grams of VOC per liter of coating
W_s	=	weight of volatiles, in grams
W_w	=	weight of water, in grams

W_{ec}	=	weight of exempt compounds, in grams
V_m	=	volume of coating, in liters

5.2 **VOC Content of Coatings:** To determine the composition of a coating in order to perform the calculations in subsection 5.1, the reference method for VOC content is Method 24 of appendix A of 40 Code of Federal Regulations (CFR) part 60, Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings, except as provided in subsections 5.3, 5.4, and 5.5. An alternative method to determine the VOC content of coatings is South Coast Air Quality Management District (SCAQMD) Method 304, incorporated by reference in subsection 5.5.10. The exempt compounds content shall be determined by SCAQMD Method 303, incorporated by reference in subsection 5.5.9. To determine the VOC content of a coating, the manufacturer may use Method 24 of Appendix A of 40 CFR part 60, or an alternative method as provided in subsection 5.3, formulation data, or any other reasonable means for predicting that the coating has been formulated as intended (e.g., quality assurance checks, recordkeeping). However, if there are any inconsistencies between the results of a Method 24 test and any other means for determining VOC content, the Method 24 test results will govern, except when an alternative method is approved by the ARB and the U.S. EPA as an alternative to Method 24. The District Air Pollution Control Officer (APCO) may require the manufacturer to conduct a Method 24 analysis.

5.3 **Alternative Test Methods:** Other test methods demonstrated to provide results that are acceptable for purposes of determining compliance with subsection 5.2, after review by the staffs of the District, the ARB, and the U.S. EPA, and approved in writing by the District APCO, may also be used.

5.4 **Methacrylate Traffic Marking Coatings:** Analysis of methacrylate multicomponent coatings used as traffic marking coatings shall be conducted according to the procedures specified in 40 CFR part 59, subpart D, appendix A, Determination of Volatile Matter Content of Methacrylate Multicomponent Coatings Used as Traffic Marking Coatings. This method is a modification of Method 24 of appendix A of 40 CFR part 60, and it has not been approved for methacrylate multicomponent coatings used for other purposes than as traffic marking coatings or for other classes of multicomponent coatings.

5.5 **Methods Incorporated by Reference:** The materials listed in this subsection are incorporated by reference in the subsections noted.

5.5.1 **Flame Spread Index:** American Society for Testing and Materials (ASTM) Designation E 84-91A, Standard Test Method for Surface Burning Characteristics of Building Material, incorporation by reference approved for section 2., Fire Retardant Coating.

5.5.2 **Gloss Determination:** ASTM Designation D 523-89, Standard Test Method for Specular Gloss, incorporation by reference approved for section 2., Flat Coating, Nonflat Coating, and Quick-Dry Enamel.

5.5.3 **Low Solids Coatings:** Bay Area Air Quality Management District (BAAQMD) Method 31, Determination of Volatile Organic Compounds in Paint Strippers, Solvent Cleaners, and Low Solids Coatings, BAAQMD Manual of Procedures, Volume III, amended 4/15/92, incorporation by reference approved for section 2., Low Solids Coating.

5.5.4 **Metal Content of Coatings:** SCAQMD Method 311-91, Determination of Percent Metal in Metallic Coatings by Spectrographic Method, incorporation by reference approved for section 2., Metallic Pigmented Coating.

5.5.5 **Acid Content of Coatings:** ASTM Designation D 1613-85, Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products, incorporation by reference approved for section 2., Pre-treatment Wash Primer.

5.5.6 **Drying Times:** ASTM Designation D 1640-83 (Reapproved 1989), Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature, incorporation by reference approved for section 2., Quick-Dry Enamel.

5.5.7 **Exempt Compounds--Siloxanes:** BAAQMD Method 43, Determination of Volatile Methylsiloxanes in Solvent-Based Coatings, Inks, and Related Materials, BAAQMD Manual of Procedures, Volume III, adopted 11/6/96, incorporation by reference approved for section 2., Volatile Organic Compound.

5.5.8 **Exempt Compounds--Parachlorobenzotrifluoride (PCBTF)**: BAAQMD Method 41, Determination of Volatile Organic Compounds in Solvent Based Coatings and Related Materials Containing Parachlorobenzotrifluoride, BAAQMD Manual of Procedures, Volume III, adopted 12/20/95, incorporation by reference approved for section 2., Volatile Organic Compound.

5.5.9 **Exempt Compounds:** SCAQMD Method 303-91, Determination of Exempt Compounds, SCAQMD "Laboratory Methods of Analysis for Enforcement Samples," incorporation by reference approved for section 2., Volatile Organic Compound and subsection 5.2.

5.5.10 **Alternative VOC Content of Coatings:** SCAQMD Method 304-91, Determination of Volatile Organic Compounds (VOC) in Various Materials, SCAQMD "Laboratory Methods of Analysis for Enforcement Samples," incorporation by reference approved for subsection 5.2.

Table 1
VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS

Limits are expressed in grams of VOC per liter[a] of coating as applied,
excluding the volume of any water, exempt compounds, or colorant added to tint bases.

Coating Category	Effective Dates					
	Current Limit	7/1/2001	7/1/2002	1/1/2005	7/1/2006	7/1/2008
Flat Coatings	250[b]	100[c]				50[c]
Nonflat Coatings	250[b]		150[c]		50[c]	
Specialty Coatings						
Bituminous Coatings	250[b]	50				
Bond Breakers	350					
Clear Wood Coatings • Lacquers (including lacquer sanding sealers) • Sanding Sealers (other than lacquer sanding sealers) • Varnishes	 680 350 350	550		275[c]		
Concrete Curing Compounds	350					
Dry Fog Coatings	400					
Fire-Retardant Coatings: • Clear • Pigmented	 650 350	250				
Floor Coatings	400[d]		100[c]		50[c]	
Form-Release Compounds	250					
Graphic Arts Coatings (Sign Paints)	500	150				
High Temperature Coatings	420					
Industrial Maintenance Coatings	340		250[c]		100[c]	
Low Solids Coatings	120[d]	120[e]				
Magnesite Cement Coatings	450					
Mastic Texture Coatings	300	250				
Metallic Pigmented Coatings	500					
Multi-Color Coatings	420	250				

Coating Category	Effective Dates					
	Current Limit	**7/1/2001**	**7/1/2002**	**1/1/2005**	**7/1/2006**	**7/1/2008**
Pre-treatment Wash Primers	420	250				
Primers, Sealers, and Undercoaters	350		200[c]		100[c]	
Quick-Dry Enamels	400[f]		250[c]		50[c]	
Roof Coatings	250[d]	50				
Rust Preventative Coatings	400[d]		250[c]		100[c]	
Shellacs: • Clear • Opaque	 730 550	 650				
Stains: • Clear and semi-transparent • Opaque	 350 350		 250[c] 150[c]			
Swimming Pool Coatings	340					
Traffic Marking Coatings	150[d]					
Waterproofing Sealers: • Concrete • Wood	400	 400 400	 250[c]			
Wood Preservatives	350					

[a] Conversion factor: one pound VOC per gallon (U.S.) = 119.82 grams VOC per liter.
[b] Current SCM default limit.
[c] These limits are subject to revision based on the outcome of scheduled SCAQMD technology assessments.
[d] National rule limit as of September 18, 1999.
[e] Units are grams of VOC per liter (pounds of VOC per gallon) of coating, including water and exempt compounds.
[f] Most common current district limit.

Compliance Advisory

Reference Table for Determining Analogous National Rule[a] and SCM [b] Categories

If your coating meets the National Rule[a] definition below...	**the following Suggested Control Measure[b] category and VOC limit applies.**
Antenna coatings Anti-fouling coatings Anti-graffiti coatings Chalkboard resurfacers Extreme high durability coatings Flow coatings Heat reactive coatings Impacted immersion coatings Nonferrous ornamental metal lacquers and surface protectants Nuclear coatings Repair and maintenance thermoplastic coatings Thermoplastic rubber coatings and mastics	Industrial maintenance coatings
Calcimine Recoaters	Flat or Nonflat coatings (depending on gloss)
Concrete curing and sealing compounds Concrete surface retarders	Concrete curing compounds
Concrete protective coatings	Waterproofing sealers
Conversion varnishes Faux finishing/glazing	Varnishes
Quick-dry primers, sealers, and undercoaters coatings Stain controllers Sealers (including interior clear wood sealers)	Primers, sealers, and undercoaters
Low solids stains Low solids wood preservatives	Low solids coatings
Zone marking coatings	Traffic marking coatings

[a] *National Volatile Organic Compound Emission Standards for Architectural Coatings* (40 CFR part 59, subpart D)
[b] 1999 *Air Resources Board Suggested Control Measure for Architectural Coatings*